



In a typical **off-the-shelf** knee replacement, the surgeon selects an implant from a limited range of standard sizes. **ConforMIS**, on the other hand, uses a patient's CT-scan data to manufacture an implant designed just for that patient. Here are some of the key differences to better understand why this is important.

OFF-THE-SHELF	CONFORMIS
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Patient-specific implant fit

With an off-the-shelf knee replacement, the metal of the implant will oftentimes overhang the bone and rub on the surrounding tissue, which can be painful. ConforMIS implants are designed to fit the unique size of each patient's femur and tibia, virtually eliminating sizing compromises that could result in this painful implant overhang.



Individualized implant shape

In order to think about the knee as a whole, it is important to not only consider its size, but equally important, its shape. Unlike off-the-shelf implants, ConforMIS implants are designed to mimic the distinct shape and curves of each patient's knee, which creates an increased potential for a more natural feeling knee.



Designed to maintain the patient's natural joint line

Patients actually have two joint lines, one on the medial side and one on the lateral side of the knee, and they can be at different heights. ConforMIS is the only knee replacement to use dual-balancing™ technology to maintain both joint lines by having individual medial and lateral polyethylene inserts rather than a single piece insert that off-the-shelf implants use.



Patient-specific surgical instrumentation

During a knee replacement procedure, the surgeon uses instruments to make cuts in the bone and place the implant. While off-the-shelf implants do come with some patient-specific instruments, ConforMIS makes patient-specific instruments for every step of the procedure using CT-scan data to help improve the accuracy of implant alignment and placement.



Designed for optimal bone preservation

Preserving as much of the patient's natural knee as possible is important and the unique design of the ConforMIS implant allows for optimal bone preservation. The implants are patient-specific and have been shown to be thinner than off-the-shelf implants, without sacrificing strength. A thinner implant allows for less bone and healthy tissue removal, which can help preserve future treatment options.

